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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,705	03/23/2001	Kazuhiko Sugiyama	P/126-202	5930

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EXAMINER	
RYMAN, DANIEL J	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/816,705	SUGIYAMA ET AL.	
	Examiner	Art Unit	
	Daniel J. Ryman	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on 27 June 2006, PROSECUTION IS HEREBY REOPENED. A rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, there is no support in the specification for the term "bandwidth," as recited in the claims.

In the amendment filed 7 November 2005, claims 1, 2, 6-11, 13, and 14, and by extension dependent claims 3-5 and 12, were amended to replace the limitation "band" with the limitation "bandwidth." In addition, claim 15, which was added by the amendment filed 7 November 2005, and by extension dependent claims 16 and 17, contains the limitation "bandwidth." For instance, the claims recite: "determining whether a first path ha[s] a first *bandwidth*" and "setting a path having a *bandwidth*". See e.g. Claim 1 (emphasis added). In contrast, the Specification recites: "A path control unit checks whether or not there is a path having a residual *band* larger than a *band* necessary for transferring the VoIP packet," p. 3, lines 4-6 (emphasis added), and "the path control unit sets a new path having a *band* that is equal to or more than a double *band* of the necessary *band*," p. 3, lines 7-9 (emphasis added). Thus, Applicant appears to equate the term "bandwidth" with the term "band."

While Applicant equates the term "bandwidth" with the term "band," the two terms are not synonymous. The term "band" refers to a range of frequencies between two defined limits, and thus is measured in hertz. Newton's Telecom Dictionary, definition of "band." The term "bandwidth" refers to the width of a communications channel, and thus is measured in bits per second for digital communication. Newton's Telecom Dictionary, definition of "bandwidth." Thus, as used in the art, "band" and "bandwidth" refer to two distinct concepts. In view of the foregoing, there is no support in the specification for the term "bandwidth," as recited in the claims.

In addition, while Applicant can be his or her own lexicographer, Examiner can find no explicit definition for the term "band" which would give it a definition other than what is commonly used in the art.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Doshi et al. (USPN 6,529,499), of record.

6. Regarding claim 10, Doshi discloses a router (ref. 220) connected between a first voice network and a second voice network to implement voice communication between a telephone associated with a first voice network and a telephone associated with a second voice network (Fig. 1 and col. 2, line 46-col. 4, line 19), comprising: logic configured to set a path having a first bandwidth that is at least two times a bandwidth necessary for transferring a VoIP packet in accordance with control by a call control apparatus (ref. 230: virtual provisioning server) (col. 2, line 46-col. 3, line 67; col. 4, lines 28-44; and col. 4, line 58-48) where each path has a bandwidth that is sufficient to support multiple connections (col. 4, line 65-col. 5, line 6) such that each path would have a bandwidth equal to or more than a double band of said necessary bandwidth.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-9 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi et al. (USPN 6,529,499), of record.

9. Regarding claims 1, 8, and 15, Doshi discloses an Internet telephone system for voice communication between a telephone subscribing to a first voice network and a telephone subscribing to a second voice network via a network using an Internet protocol (Fig. 1 and col. 2, line 46-col. 4, line 19), comprising: a plurality of routers (ref. 220) configured to use a switching technique (col. 4, lines 1-19); a first media gateway (ref. 215: packet circuit gateway, PCG) coupled to a first one of the plurality of routers and a first signaling transfer point (ref. 250: signaling gateway) connected to said first voice network (col. 2, line 46-col. 3, line 42); a second media gateway (ref. 215: packet circuit gateway, PCG) coupled to a second one of the plurality of routers and a second signaling transfer point (ref. 250: signaling gateway) connected to said second voice network (col. 2, line 46-col. 3, line 42); a path control unit (ref. 230: virtual provisioning server) configured to: determine whether a first path having a first bandwidth larger than a bandwidth necessary for transferring said VoIP packet between said first router and said second router exists (col. 3, lines 43-67; col. 4, lines 28-44; and col. 4, line 58-48); and a packet control unit (ref. 250: signaling gateway) coupled to said path control unit (ref. 230: virtual provisioning server), configured to: instruct said first media gateway (ref. 215: packet circuit

gateway, PCG) and said second media gateway (ref. 215: packet circuit gateway, PCG) to transfer VoIP packets via a path (Fig. 1 and col. 3, lines 43-61).

Doshi does not expressly disclose in the main embodiment that the routers are label switch routers; that, when it is determined that the first path having the first bandwidth does not exist, set a new path having a bandwidth that is equal to or more than double the bandwidth necessary for transferring the VoIP packet; or that the path set by said path control unit is used when another path cannot be found; however, Doshi does disclose in another embodiment that the routers can be label switch routers since label switch routers are well known (col. 9, lines 54-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the routers be label switch routers since label switch routers are well known.

Doshi also discloses that, when label switch routers are used, the path control unit (ref. 230: virtual provisioning server) "maintains a knowledge base of possible multiple paths between pairs of" media gateways (ref. 215: packet circuit gateway, PCG) such that the packet control unit (ref. 250: signaling gateway) is instructed to admit a new call when there is capacity over any of the possible paths (col. 9, lines 54-56) where each path has a band that is sufficient to support multiple connections (col. 4, line 65-col. 5, line 6) such that each path would have a band equal to or more than a double band of said necessary band. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to set, when it is determined that there is not said path, by the path control unit, a new path having a band that is equal to or more than a double band of said necessary band and to use this path for the new connection since these steps are implemented when label switch routers are used.

10. Regarding claims 2 and 9, Doshi does not expressly disclose that the new path has a bandwidth that is equal to or more than a hundred times of the first bandwidth; however, Doshi does disclose that each path can support multiple connections (col. 4, line 65-col. 5, line 6). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Doshi discloses that the new path is equal to or more than a number of times of the first bandwidth, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the bandwidth of the new path be equal to or greater than any number of times the first bandwidth, including a hundred, absent a showing of criticality by Applicant.

11. Regarding claim 3, Doshi implicitly discloses a route control unit configured to control said plurality of label switch routers (col. 9, lines 54-64) since Doshi discloses that the router is a label switch router (col. 9, lines 54-64) and Doshi discloses that the Signaling Gateways are capable of dictating which path out of a plurality of alternative paths a packet should traverse between the label switch routers (col. 9, lines 54-64). Thus, Doshi implicitly discloses a route control unit configured to control said plurality of label switch routers since a route control unit

is necessary for a unit to designate a particular path through a network of label switch routers for a packet to traverse.

12. Regarding claim 4, Doshi discloses that the route control unit is provided to each label switch router since each router is capable of routing a packet among a variety of paths (col. 9, lines 54-64) where "provided to" is a broad phrase which only requires that each label switch router is connected to a route control unit.

13. Regarding claim 5, Doshi discloses that the route control unit is connected to all label switch routers (col. 9, lines 54-64) since each label switch router would need to have access to the route control unit in order for the router control unit to specify a particular path through the network of label switch routers.

14. Regarding claim 6, Doshi discloses a path setting method of setting a path to which a bandwidth is ensured on a network using an Internet protocol connected between a first voice network and a second voice network to execute voice communication between a telephone associated with said first voice network and a telephone associated with said second voice network (Fig. 1 and col. 2, line 46-col. 4, line 19), comprising: determining whether a first path having a residual bandwidth larger than a first bandwidth necessary for transferring a VoIP packet between two edge routers (ref. 220) (col. 3, lines 43-67; col. 4, lines 28-44; and col. 4, line 58-48).

Doshi does not expressly disclose in the main embodiment that the routers are label switch routers or that, when it is determined that the first path does not exist, setting a new path having a bandwidth that is equal to or more than double the first bandwidth; however, Doshi does disclose in another embodiment that the routers can be label switch routers since label

switch routers are well known (col. 9, lines 54-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the routers be label switch routers since label switch routers are well known.

Doshi also discloses that, when label switch routers are used, the path control unit (ref. 230: virtual provisioning server) "maintains a knowledge base of possible multiple paths between pairs of" media gateways (ref. 215: packet circuit gateway, PCG) such that the packet control unit (ref. 250: signaling gateway) is instructed to admit a new call when there is capacity over any of the possible paths (col. 9, lines 54-56) where each path has a band that is sufficient to support multiple connections (col. 4, line 65-col. 5, line 6) such that each path would have a band equal to or more than a double band of said necessary band. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to set, when it is determined that the first path does not exist, a new path having a bandwidth that is equal to or more than double the first bandwidth since this step is implemented when label switch routers are used.

15. Regarding claim 7, Doshi does not expressly disclose that the new path has a bandwidth that is equal to or more than a hundred times of the first bandwidth; however, Doshi does disclose that each path can support multiple connections (col. 4, line 65-col. 5, line 6). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re

Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Doshi discloses that the new path has a bandwidth that is equal to or more than a number of times of the first bandwidth, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the bandwidth of the new path be equal to or greater than any number of times the first bandwidth, including a hundred, absent a showing of criticality by Applicant.

16. Regarding claim 11, Doshi does not expressly disclose that the path has a band that is equal to or more than a hundred times of the first bandwidth; however, Doshi does disclose that each path can support multiple connections (col. 4, line 65-col. 5, line 6). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Doshi discloses that the path has a bandwidth of the path that is equal to or more than a number of times of the first bandwidth, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the bandwidth of the path be equal to or greater than any number of times the first bandwidth, including a hundred, absent a showing of criticality by Applicant.

17. Regarding claim 12, Doshi does not expressly disclose in the main embodiment that the router is a label switch router; however, Doshi does disclose in another embodiment that the routers can be label switch routers since label switch routers are well known (col. 9, lines 54-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the routers be label switch routers since label switch routers are well known.

18. Regarding claim 13, incorporating the rejection of claims 1, 6, and 8, Doshi discloses all of the limitation of claim 13, as outlined in the rejection of claims 1, 6, and 8, except that the method is implemented using a computer program product. Examiner takes official notice that it is well known to implement a method using software since software is flexible. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method using a computer program product since software is flexible.

19. Regarding claim 14, Doshi does not expressly disclose that the new path has a bandwidth of a hundred times of the first bandwidth; however, Doshi does disclose that each path can support multiple connections (col. 4, line 65-col. 5, line 6). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Doshi discloses that the new path has a bandwidth that is equal to or more than a number of times of the first

bandwidth, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the bandwidth be equal to or greater than any number of times the first bandwidth, including a hundred, absent a showing of criticality by Applicant.

20. Regarding claim 16, Doshi does not expressly disclose that the controller is further configured to: manage the use of labels associated with the label switching network such that transfer of a VoIP packet from the first device to the second device through at least one other device uses a single label. However, Doshi does disclose the use of labels to communicate between a pair of devices. Examiner takes official notice that it is well known in MPLS to establish a path between two devices using a single label since this facilitates communication between the two devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to manage the use of labels associated with the label switching network such that transfer of a VoIP packet from the first device to the second device through at least one other device uses a single label in order to facilitate communication between the two devices

21. Regarding claim 17, Doshi discloses that each of the first and second devices comprises an edge router and the other device comprises a core router (col. 9, lines 54-65).

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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